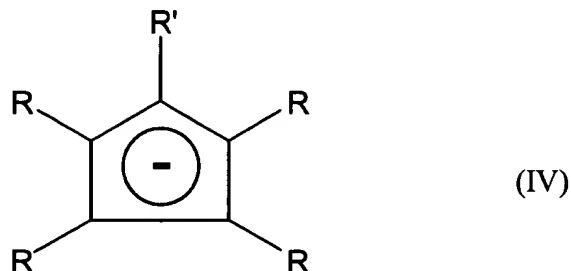


REMARKS

Claim 27 has been amended to clarify that the formula (IV) structure is:



Claim 27 has also been amended to replace "or" with --and-- in two instances. Support for these amendments is found in the specification at, for example, page 2, line 19 - page 3, line 15 and page 7, lines 4-6.

It is submitted that no new matter has been introduced by the foregoing amendments. Approval and entry of the amendments are respectfully solicited.

Objection

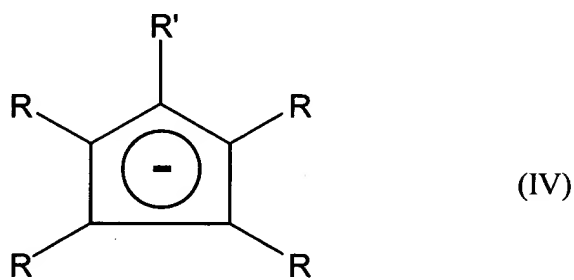
Claim 27 was objected to for containing "informalities." The Examiner suggested that "or" be replaced with "and" at lines 5 and 7 of claim 27. (Office Action at 2.) With a view toward furthering prosecution, claim 27 has been amended as the Examiner suggested. Accordingly, the objection has been rendered moot and should be withdrawn.

Indefiniteness Rejection

Claims 27-31 were rejected under 35 USC § 112, second paragraph. (Office Action at 2.) In making the rejection, the Examiner asserted that "the recitation

of Formula (IV) causes indefiniteness because such structure is not supported by the specification.”

With a view toward furthering prosecution, claim 27 has been amended to clarify that the formula (IV) structure is:



In view of this amendment, the scope of the amended claims are clearly ascertainable (and described in the specification). Accordingly, the rejection has been rendered moot and should be withdrawn.

Rejection under 35 USC § 102

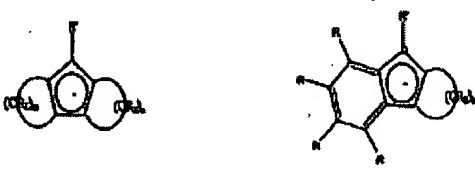
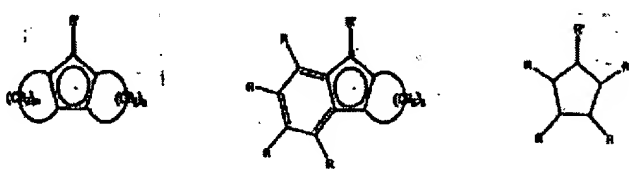
Claims 27-31 were rejected under 35 USC § 102(a) as anticipated by Siedle *et al.*, U.S. Patent No. 5,296,433 (“Siedle”). (*Id.* at 3.)

For the reasons set forth below, the rejection, respectfully is traversed.

Siedle discloses “complex compounds of tris(-pentafluorophenyl)borane and to mixtures containing the borane complexes and an organometallic complex that are useful as catalysts for polymerization and copolymerization of olefins...” (Col. 1, lines 7-12.) Siedle further discloses that “[c]atalysts useful for polymerization of olefinic hydrocarbons may be prepared using the precursor borane complexes and hydrocarbylcyclopentadienyl metal complexes having the general formula: $(Cp)_pM(R^4)_{4-p}$.” (Col. 6, lines 26-33.) Siedle discloses that examples of Cp include

"cyclopentadienyl, indenyl, fluorenyl, bis(octahydrofluorenyl), 1,2-bis(1-indenyl)ethane, 1,2-bis(tetrahydroindenyl)ethane, isopropyl(cyclopentadienyl-1-fluorenyl) and 1,3-bis(9-fluorene)propane." (Col. 7, lines 4-8.)

In making the rejection, the Examiner asserted that the "present invention relates to"

cyclopentadiene ligand - $(Yr_p)_q(Cp)(Cp')$	
Cp is a group selected from	
Cp' is a group selected from	

(summary of claim 27)

(Office Action at 3.) The Examiner further asserted that Siedle discloses "a ligand for the catalyst used for polymerization of olefin, comprising a hydrocarbylcyclopentadienyl metal complex having the general formula: $(Cp)_pM(R^4)_{4-p}$, wherein M is titanium, zirconium, or hafnium and p is 1 or 2 (col. 6, lines 26-68; col. 7, lines 1-3)." (*Id.* at 4.) The Examiner also asserted that Siedle discloses "that 'suitable examples of Cp include ... bis(octahydrofluorenyl)...'" (col. 7, lines 4-8.)." (*Id.*) The Examiner then concluded: "the present claims are anticipated." (*Id.* at 4.)

As is well settled, anticipation requires "identity of invention." *Glaverbel Societe Anonyme v. Northlake Mktg. & Supply*, 33 USPQ2d 1496, 1498 (Fed. Cir. 1995). Each and every element recited in a claim must be found in a single prior art reference and arranged as in the claim. *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). "Moreover, it is incumbent upon the Examiner to **identify where each and every facet** of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 USPQ2d 1461, 1462 (BPAI 1990). The Examiner is required to point to the disclosure in the reference "**by page and line**" upon which the claim allegedly reads. *Chiong v. Roland*, 17 USPQ2d 1541, 1543 (BPAI 1990).

In making the rejection, the Examiner "summarized" claim 27 in the table on page 3 of the Office Action. However, it is the claims that define what the applicant deems as his invention and **it is the claims which are examined and rejected**, if appropriate. See 37 CFR § 1.104(c). In the Office Action, the Examiner presented a "summary" of claim 27 and then proceeded to reject that "summary." This, however, is not the stuff of a §102 rejection. Having rejected the "summary" of claim 27, the Examiner has not rejected what is claimed, and the rejection is both legally and factually deficient. For this reason alone, the rejection should be withdrawn.

In the "summary" table the Examiner asserted that the present invention is a "cyclopentadiene ligand – (Y_r)_q(Cp)(Cp')." However, the claimed ligand has the

formula $(YR_p)_q(Cp)(Cp')$.¹ The Examiner's error in "summarizing" the claimed invention is not surprising given that the Examiner fails to even mention the $(YR_p)_q$ group of the claimed ligand again. The "summary" table offered definitions of Cp and Cp'. However, no attempt to define the $(YR_p)_q$ portion of the ligand is in the table or anywhere else in the rejection.

Having failed to address the $(YR_p)_q$ portion of the claimed ligand, the Examiner failed to identify where in Siedle each and every element of claim 27 is shown. That, however, was the Examiner's burden. Accordingly, the rejection is insufficient as a matter of law and fact to support a conclusion of anticipation, and for this additional reason, the rejection should be withdrawn.

The Examiner relied on Siedle as disclosing bis(octahydrofluorenyl) as an example of the C_p component. However, the Examiner appears to have misapprehended the structure of the claimed ligand. Even when the claimed ligand contains two octahydrofluorenyl moieties, they cannot be in the form of bis(octahydrofluorenyl). On the contrary, the two octahydrofluorenyl moieties are bridged by the $(YR_p)_q$ group ignored in the Examiner's "summary" of claim 27.

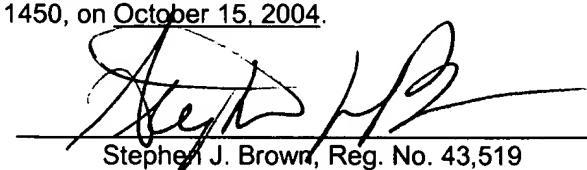
Thus, even if the Examiner's characterization of Siedle is accepted as correct, the Examiner has not demonstrated that Siedle discloses what is claimed. Nor has the Examiner identified any evidence that would suggest a bridged ligand as recited in claim 27. Accordingly, the rejection is insufficient as a matter of fact and should be withdrawn.

¹ Nowhere in the instant application is the term "r" recited. We assume that the Examiner intended to reference the formula recited in claim 27 (including $(YR_p)_q$). If this assumption is incorrect the examiner is requested to reissue the Office Action and clearly state the grounds for rejection of the claims.

The rejection is devoid of any discussion of claims 28-31 separate from claim 27. Accordingly, the record is devoid of any evidence that the Examiner individually considered claims 28-31. It is axiomatic, however, that a dependent claim is not *per se* anticipated by prior art that anticipates the base claim. Accordingly, "[e]xaminers are reminded that a dependent claim is directed to a combination including everything recited in the base claim and what is recited in the dependent claim. ***It is this combination that must be compared with the prior art, exactly as if it were presented as one independent claim.***" MPEP § 608.01(n) (8th ed. Rev. 2, May 2004, pp. 600-80). This the Examiner has not done. Accordingly, the rejection is both factually and legally deficient as to claims 28-31. For this additional reason, the rejection should be withdrawn as to claims 28-31.

Accordingly, for the reasons set forth above, entry of the amendments, withdrawal of the rejections, and allowance of the claims are respectfully requested. If the Examiner has any questions regarding this paper, please contact the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 15, 2004.


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Respectfully submitted,

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